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66376-325-7

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Bertram OBERMAYER et al.

Serial No.: 10/619,464

Filed: July 167, 2003

CYLINDER HEAD FOR A  
MULTICYLINDER LIQUID-COOLED  
INTERNAL COMBUSTION ENGINE

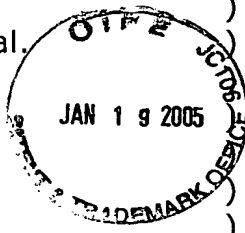
) PATENT

) GROUP: 3747

) EXAMINER: Katrina B. HARRIS

) CUSTOMER NO: 25269

) CONFIRMATION NO. 7354



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RESPONSE TO NOTICE OF NON-COMPLIANT AMENDMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

January 19, 2005

Sir:

In response to the Notice of Non-Compliant Amendment dated  
January 13, 2005, please amend this application as follows:

**IN THE CLAIMS:**

1-5. **(Cancel).**

6. **(Currently amended)** Cylinder head for a multi-cylinder liquid-cooled internal combustion engine, with a cooling chamber configuration adjacent to a fire deck, which is divided by an intermediate deck essentially parallel to the fire deck into a lower cooling chamber next to the fire deck and an upper cooling chamber adjoining the lower cooling chamber in the direction of the cylinder axis, wherein lower and upper cooling chambers communicate with each other via at least one first transfer opening, and wherein at least one first transfer opening is provided in an area of an opening receiving a centrally disposed fuel injection device, and wherein at least one coolant inlet per cylinder opens into the lower cooling chamber, and at least one coolant outlet departs

from the upper cooling chamber, and wherein a lower cooling chamber is associated with each cylinder and the lower cooling chambers of at least two adjacent cylinders are essentially separated from each other by a partitioning wall and a coolant flow in the lower cooling chamber is essentially transverse to the cylinder head, and wherein the upper cooling chamber extends over at least two cylinders, wherein the first transfer opening and the opening receiving the fuel injection device are spatially separated by a defined minimum distance between the receiving opening and the transfer opening by a portion of the cylinder head, and wherein at least one first transfer opening is disposed in an area of at least one web between intake port and receiving opening and/or exhaust port and receiving opening.

7. **(Previously presented)** Cylinder head according to claim 6, wherein at least two first transfer openings are disposed diametrically to the opening receiving the fuel injector.

8. **(Previously presented)** Cylinder head according to claim 6, wherein a second transfer opening is additionally provided in an area of a sidewall of the cylinder head.

9. **(Previously presented)** Cylinder head according to claim 6, wherein only part of the coolant volume passing between lower and upper cooling chambers is delivered through the at least one first transfer opening in the area of the opening receiving the fuel injector.

10. **(Previously presented)** Cylinder head according to claim 9, wherein 20 to 40 percent of the entire coolant flow through said chambers

is delivered through the first transfer opening in the area of the opening receiving the fuel injector.

11. **(Previously presented)** Cylinder head according to claim 6, wherein at least one of the first or second transfer opening is cast or drilled.

**REMARKS**

By this Supplemental Amendment the claim revisions proposed in the Amendment of January 3, 2005 have been presented again with the proper status identifiers used for claims 7-11.

Respectfully submitted,

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By:



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